REMARKS

Applicant respectfully requests allowance of the subject application. Claims 56-57 and 61-67 are pending. Claims 58-60 and 68-74 were previously cancelled.

35 U.S.C. §103

Claims 56, 61, and 63-67 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,861,881 to Freeman et al. (hereinafter "Freeman") in view of U.S. Patent 5,884,056 to Steele (hereinafter "Steele"). Applicant respectfully traverses the rejection.

Claim 56 is directed to a viewer computing unit for receiving and displaying continuous video content programs comprising:

- a memory;
- a processor programmed to determine whether the video content programs are interactive;
- a tuner to tune to channels carrying the video content programs; and
- an Internet browser stored in the memory, the Internet browser being dynamically loadable for execution on the processor when the tuner is tuned to a channel carrying a video content program that is interactive.

Claim 61 is directed to a computer-implemented method for activating interactive supplemental content for a video content program upon tuning to a channel carrying the video content program, comprising the following steps:

- determining if a program is interactive compatible, where an interactive compatible program is associated with target resources containing data

which supports interactive functionality, the target resources being located by corresponding target specifications; and

- in an event that the program is interactive compatible, retrieving a target specification associated with the program and dynamically launching an Internet browser to activate the target resource in support of interactive functionality for the program.

Claim 67 is directed to a computer-implemented method for activating interactive supplemental content for a video content program upon tuning to a channel carrying the video content program, comprising the following steps:

- determining if a program is interactive compatible, where an interactive compatible program is associated with target resources containing data which support interactive functionality in conjunction with the interactive compatible program, the target resources being located by corresponding target specifications;
- in an event that the program is interactive compatible, retrieving a target specification associated with the program and launching an Internet browser to activate the target resource in support of interactive functionality for the program; and
- automatically displaying the interactive supplemental content together with the program.

Freeman and Steele, alone or in combination, do not disclose, teach or suggest an "Internet browser being dynamically loadable for execution on the processor when the tuner is tuned to a channel carrying a video content program that is interactive" as claimed in Claim 56. Additionally, Freeman and Steele, alone or in combination, do not disclose, teach or suggest "dynamically launching

an Internet browser to activate the target resource" as claimed in Claim 61 or "launching an Internet browser to activate the target resource" as claimed in Claim 67.

Freeman is directed to an interactive computer system that provides "not only the ability to branch amongst parallel transmitted data streams, but also, the capability to seamlessly integrate input from other media, such as CD-ROMs and laser disks, into the presentation". *Freeman, Col. 2, Lines 15-19.* The system of Freeman includes a vertical blanking interval switch, as described in the following excerpt:

> A vertical blanking interval (VBI) switch 180 is connected to the microprocessor 108 so that the input may be switched during the vertical blanking interval of the current stream, resulting in a seamless switch to the viewer. .... Based on user responses and control codes, it is assumed that the microprocessor 108 determines that a switch from video signal A to video signal C should be performed. .... A command is issued from the microprocessor 108 to the RF demodulator 102B commanding a switch to the channel and data stream on which video signal C is located. *Freeman, Col. 9, Lines 37-51.*

The system of Freeman utilizes "trigger points" to provide additional data, which is described in Freeman as follows:

> The trigger points 900 correspond to times when interactive events are scheduled to take place. These interactive events could be the selection and playing of video, audio segments or the display of graphics. While the choice of particular video, audio or graphics is still dependent on viewer selections, the viewer selections in response to displayed graphical interrogatory messages are preferably made during a period at the onset of the program or when a viewer first tunes into the program. These viewer selections are then utilized as inputs to macros called up at later times during the program by the controller upon the occurrence of the trigger

> points, identified to the interactive computer by unique codes embedded in the video signal.
>
> The trigger points correspond to the times when the conventional program content can be altered and personalized for those subscribers capable of receiving the interactive signal. *Freeman, Col. 12, Lines 37-53.*

Freeman also describes that each trigger point "is identified preferably through the broadcast of ACTV codes sent as part of the composite interactive program signal." *Freeman, Col. 13, Lines 15-17.* Freeman describes the use of the trigger points as follows:

> Upon extraction of the codes by the data decoder, the CPU 108 reads and interprets the codes and calls from memory a particular user selection(s) designated by the trigger point codes. The user selections correspond to subscriber answers to a series of interrogatory messages preferably presented at the beginning of the program. After obtaining the appropriate user selection(s), the controller 108 reads and performs the executable instructions using the user selection(s) as input(s) in the macro algorithm. The result of the algorithm is either a selected video stream, audio and/or selected graphics response. The video/audio response can be called from memory if it is prestored, called from external data storage, or the controller can command the switch to branch to the particular video audio stream if the response is broadcast concurrently with the trigger point. *Freeman, Col. 13, Lines 27-45.*

Thus, Freeman describes a system that uses a trigger point identified through the broadcast of ACTV codes to call from memory a particular user selection(s) designated by the trigger point codes that correspond to subscriber answers to a series of interrogatory messages preferably presented at the beginning of the program.

In rejecting claims 56, 61, and 63-67, the Office makes the following assertion:

> In addition, Freeman discloses Interactive programs can be created using the Internet. Interactive program authors can access a particular internet site and download graphics, audio and video clips and suggested interaction (col. 19, line 34+). Thus, by selecting the online menu to access the Internet, the system must be configured with Dynamic-link library (DLL) file associated with an application so that when online menu is selected, the DLL file is loaded and executed to call up an application for accessing the Internet. *Office Action Dated June 8, 2004, Page 6 (emphasis added).*

This assertion is unsupported and incorrect. Freeman does not disclose, teach or suggest that "by selecting the online menu to access the Internet, the system must be configured with Dynamic-link library (DLL) file associated with an application so that when online menu is selected, the DLL file is loaded and executed to call up an application for accessing the Internet" as asserted by the Office. *Office Action Dated June 8, 2004, Page 6.* Rather, Freeman merely describes downloading graphics, audio and video clips from an Internet site to *create* an Interactive program, as shown in the following excerpt of Freeman asserted by the Office:

> Interactive programs of the present invention can be created using the Internet. Interactive program authors can access a particular Internet site and download graphics, audio and video clips and suggested interactions. The author can then use these elements in the authoring tools to create an interactive program.
>
> Furthermore, viewers can watch interactive programs from the Internet itself using the systems of the present invention. From an Internet site, viewers can access a single channel interactive program, such as described above. The viewer would watch the video on his or her computer, while the audio and/or text/graphics from Web site locations, for example, would be presented as a function of his or her specific choices via interactive commands.

> In addition, viewers can choose between multiple video streams originating from a site on the Internet. The seamless branching between different video streams would occur through interactive commands resident in the viewer's computer. *Freeman, Col. 19, Lines 34-52.*

As shown in the above excerpt, Freeman merely describes the creation of an interactive program using graphics, audio and video clips downloaded from an Internet site. Nowhere in the Freeman reference is there disclosure, teaching, or suggestion for the assertion by the Office that "when online menu is selected, the DLL file is loaded and executed to call up an application for accessing the Internet". *Office Action Dated June 8, 2004, Page 6.* Indeed, Freeman does not even mention a dynamic link library, or include the words "DLL" or "dynamic".

The Office correctly asserts that Freeman does not specifically disclose an Internet browser stored in the memory. The Office then asserts Steele at column 5, lines 10+ to cure the defects of Freeman. The referenced section of Steele, however, merely states that "a client machine 10 includes a computer or other device (as discussed above), running a Web browser program" and makes no mention as to how the web browser program is loaded or discloses criteria for loading the web browser program. *Steele, Col. 5, Lines 10-12.*

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Ryoka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). *See also In re Wilson*, 165 U.S.P.Q. 494 (C.C.P.A. 1970). Freeman and Steele, alone and in combination, are silent as to the claimed aspect of "the Internet browser being dynamically loadable for execution on the processor when the tuner is tuned to a channel carrying a video content program that is interactive" as claimed in Claim 56. Freeman does not show this feature nor address loading of the Internet browser. Rather, Freeman focuses on display

of user selections in response to trigger points. Steele does not correct the defects of Freeman. Accordingly, neither Freeman nor Steele, alone or in combination, disclose, teach or suggest an "Internet browser being dynamically loadable for execution on the processor when the tuner is tuned to a channel carrying a video content program that is interactive" as claimed in Claim 56. Further, neither Freeman nor Steele, alone or in combination, disclose, teach or suggest "dynamically launching an Internet browser to activate the target resource" as claimed in claim 61 nor "launching an Internet browser to activate the target resource" as claimed in claim 67.

Additionally, neither Freeman nor Steele, alone or in combination, disclose, teach or suggest the claimed limitations for loading a web browser. Claim 56 recites "the Internet browser being dynamically loadable for execution on the processor when the tuner is tuned to a channel carrying a video content program that is interactive". Claims 61 and 67 recite "in an event that the program is interactive compatible, ... launching an Internet browser". As previously described, Freeman makes no mention of a browser whatsoever and Steele does not disclose, teach, or suggest the loading of a browser. Accordingly, neither Freeman nor Steele, alone or in combination, disclose, teach or suggest the above limitations.

Therefore, it is respectfully submitted that the Office has not made a *prima facie* showing of obviousness with respect to the subject claims. For these and other reasons, claims 56, 61 and 67 are allowable over Freeman and Steele, alone or in combination. Applicant respectfully requests that the §103 rejections of claims 56, 61, and 67 be withdrawn.

Claim 63 depends from claim 61 and is allowable by virtue of this dependency.

Claim 64 is directed to a computer-implemented method for activating interactive supplemental content for a video content program upon tuning to a channel carrying the video content program, comprising the following steps:

- determining if a program is interactive compatible by checking a channel separate from said channel carrying the video content program for presence of the supplemental content, where an interactive compatible program is associated with target resources containing data which support interactive functionality in conjunction with the video content program, the target resources being located by corresponding target specifications; and
- in an event that the program is interactive compatible, retrieving a target specification associated with the program and dynamically launching an Internet browser to activate the target resources in support of interactive functionality for the program.

Neither Freeman nor Steele, alone or in combination, disclose, teach or suggest "determining if a program is interactive compatible by checking a channel separate from said channel carrying the video content program" as claimed in claim 64. Additionally, neither Freeman nor Steele, alone or in combination, disclose, teach or suggest "dynamically launching an Internet browser" as claimed in Claim 64.

As previously stated, Freeman is directed to a system for integrating video programming. Freeman describes a system that uses a trigger point identified through the broadcast of ACTV codes to call from memory a particular user

selection(s) designated by the trigger point codes that correspond to subscriber answers to a series of interrogatory messages preferably presented at the beginning of the program. Thus, Freeman obtains the trigger point from the broadcasted ACTV codes.

Both Freeman and Steele are silent as to the claimed aspect of "determining if a program is interactive compatible by checking a channel separate from said channel carrying the video content program" as claimed in Claim 64.

The Office asserts Freeman at column 13, lines 45+ for such a teaching, which is excerpted as follows:

> As mentioned above, a series of interrogatory messages are preferably presented when the subscriber begins watching the interactive program. These interrogatory messages can be presented in any one of three ways. First, the interrogatory messages can be presented as graphics displays overlaid by the interactive computer workstation onto a video signal, wherein the graphics data is sent in the vertical blanking interval of the composite interactive signal, or alternatively stored on the hard disk or external storage. Second, the interrogatory messages are presented as graphics displays as discussed above, except the graphics data comes from local storage, external data storage (e.g., CD ROM, cartridge, etc.), or a combination of data in the VBI and data called from either local or external data storage. Third, graphics data can be presented in the form of user templates stored at the interactive computer workstation. *Freeman, Col. 13, Lines 45-60.*

In the referenced section, Freeman merely describes sources for a display of interrogatory messages that are answered by the subscriber when the subscriber begins watching the interactive program. This section does not describe "determining if a program is interactive compatible by checking a channel

separate from said channel carrying the video content program" as claimed in Claim 64.

As previously described, Freeman discusses the use of "trigger points", in which "[e]ach trigger point is identified preferably through the broadcast of ACTV codes sent as part of the composite interactive program signal." *Freeman, Col. 13, Lines 15-17 (emphasis added).* Therefore, the ACTV codes are part of the interactive program signal itself, and are not provided through a channel separate from said channel carrying the video content program. Again, Freeman merely detects interactive content through use of the trigger points, and does not disclose, teach, or suggest, alone or in combination with any of the other submitted references, that a "determination is made as to whether a program is interactive compatible by checking a channel separate from a channel carrying the video content program for presence of supplement content" as claimed in claim 64.

Steele does not correct the defects of Freeman, and again is used only for its mention of a Web browser. The Office makes the unsupported assertion that "it would have been obvious to one of ordinary skill in the art to modify Freeman to use the teaching as taught by Steele in order to allow computer user to surf the Web." *Office Action Dated June 8, 2004, Page 10.* When applying 35 U.S.C. 103, however, the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination and must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention. *See MPEP § 2141 and Hodosh v. Block Drug Co., Inc.,* 786 F.2d 1136, 1143 n.5, 220 USPQ 182, 187 n.5 (Fed. Cir. 1986). It is respectfully submitted that the Office has engaged in impermissible hindsight reconstruction based on the subject specification. Neither Freeman nor Steele, alone or in

combination, disclose, teach or suggest "determining if a program is interactive compatible by checking a channel separate from said channel carrying the video content program" as claimed in claim 64.

For these reasons, claim 64 is allowable over Freeman and Steele, alone or in combination. Applicant respectfully requests that the §103 rejection of claim 64 be withdrawn.

Claim 65 is directed to a computer-implemented method for activating interactive supplemental content upon tuning to a channel carrying the video content program, comprising the following steps:

- determining if a program is interactive compatible, where an interactive compatible program is associated with target resources containing data which support interactive functionality in conjunction with the interactive compatible program, the target resources being located by corresponding target specifications;
- displaying an icon to visually inform the viewer that the program is interactive compatible; and
- in an event that the program is interactive compatible, retrieving a target specification associated with the program and launching an Internet browser to activate the target resource in support of interactive functionality for the program.

Claim 66 is directed to a computer-implemented method for activating interactive supplemental content for a video content program upon tuning to a channel carrying the video content program, comprising the following steps:

- determining if a program is interactive compatible, where an interactive compatible program is associated with target resources containing data

which supports interactive functionality in conjunction with the interactive compatible program, the target resources being located by corresponding target specifications;

- displaying the interactive supplemental content in response to the viewer activating an icon; and
- in an event that the program is interactive compatible, retrieving a target specification associated with the program and launching an Internet browser to activate the target resource in support of interactive functionality for the program.

As previously discussed in relation to Claims 56, 61, and 67, neither Freeman nor Steele, alone or in combination, disclose, teach or suggest "launching an Internet browser" as claimed in claims 65 and 66.

Claim 65 further describes "displaying an icon to visually inform the viewer that the program is interactive compatible". Claim 66 describes "display the interactive supplement content in response to the viewer activating an icon". Contrary to the Office's assertion, Steele does not disclose displaying an icon to visually inform the viewer that the program is interactive compatible. Indeed, the only mention of the word "icon" in Steele is in relation to a hyperlink, an example of which is shown in the following excerpt:

> The World Wide Web facilitates user access to information resources by letting people jump from one server to another simply by selecting a highlighted word, picture or icon (a program object representation) about which they want more information--a maneuver known as a "hyperlink". *Steele, Col. 2, Lines 30-34.*

Freeman does not mention the word "icon", and therefore does not cure the defects of Steele. The Office asserts a graphical interrogatory message of Freeman at col. 13, lines 45+, which is again excerpted as follows:

> As mentioned above, a series of interrogatory messages are preferably presented when the subscriber begins watching the interactive program. These interrogatory messages can be presented in any one of three ways. First, the interrogatory messages can be presented as graphics displays overlaid by the interactive computer workstation onto a video signal, wherein the graphics data is sent in the vertical blanking interval of the composite interactive signal, or alternatively stored on the hard disk or external storage. Second, the interrogatory messages are presented as graphics displays as discussed above, except the graphics data comes from local storage, external data storage (e.g., CD ROM, cartridge, etc.), or a combination of data in the VBI and data called from either local or external data storage. Third, graphics data can be presented in the form of user templates stored at the interactive computer workstation. *Freeman, Col. 13, Lines 45-60.*

In the referenced section, Freeman merely describes graphical displays, and does not disclose, teach or suggest an icon.

As previously described, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Ryoka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). *See also In re Wilson*, 165 U.S.P.Q. 494 (C.C.P.A. 1970). It is respectfully submitted that the Office has not shown as to how the graphical interrogatory messages teach or suggest "displaying an icon to visually inform the viewer that the program is interactive compatible" as claimed in claim 65 or "display the interactive supplement content in response to the viewer activating an icon" as claimed in claim 66.

For these and other reasons, claims 56, 61, and 63-67 are allowable over Freeman in view of Steele. Applicant respectfully requests that the §103 rejections of claims 56, 61, and 63-67 be withdrawn.

Claims 57 and 62 are rejected under 35 U.S.C. §103(a) as being obvious over Freeman in view of Steele and further in view of United State Patent No. 5,629,733 to Youman et al (hereinafter "Youman"). Applicant respectfully traverses the rejection.

Claim 57 is directed to a viewer computing unit as recited in Claim 56, and further describes:

- an electronic programming guide (EPG) stored in the memory and executable on the processor to organize programming information, the EPG associating a target specification to a target resource with a video content program; and
- the Internet browser activating the target resource when the tuner is tuned to the video content program.

The Office first asserts Freeman for a viewer-computing unit. The Office then asserts Steele for teaching of the Internet browser. As previously stated, neither Freeman nor Steele, alone or in combination, disclose, teach or suggest "the Internet browser being dynamically loadable" as claimed in claim 56. Youman does not cure this defect in Freeman and Steele. Accordingly, this claim is allowable for at least this reason.

The Office then correctly asserts that neither Freeman nor Steele specifically discloses an EPG stored in the memory and executed on the processor to organize program information. To cure the defects of Freeman and Steele, the Office asserts Youman for teaching "the EPG associating a target specification to a target resource

with a video content program" as claimed in Claim 57. The Applicant respectfully disagrees.

Beginning at page 10 of the subject specification, an example of a data structure is described which is used by an EPG database to organize programming information and to correlate target specifications with programs. The data structure includes a number of data records comprising various data fields for holding programming information. The data structure includes a data field for holding target specifications which reference target resources supporting the supplemental content. The data structure correlates the target specifications with the programs by associating them within the same program record. The presence of a target specification within the data field indicates that the associated program is interactive and that complementary content can be displayed in addition to the program itself.

The Office asserts Youman at col. 8, lines 8+, and FIGS 1, and 19-21 for teaching "the EPG associating a target specification to a target resource with a video content program" as claimed in Claim 57, the asserted portion is excerpted as follows:

> The transmitted program schedule data or application software is received by the receiver 12 on signal input line 11. The received signal is passed from the receiver to a data demodulator 13, such as a QPSK demodulator or a GI Info-Cipher 1000R, which demodulates the transmission and passes it to a buffer 15.
>
> A microcontroller 16, such as a M68000EC, receives data passed to the buffer 15. Bootstrap operating software, which may be used for capturing electronic program guide application software updates, is stored in a read only memory (ROM) 17. The microcontroller 16 uses the received program schedule information to build a database by storing the data in appropriately organized records in dynamic random access

> memory (DRAM) 18. The stored schedule information can be updated on a periodic basis, such as hourly, daily or weekly, or at any time when changes in scheduling or other factors warrant an update. The system also includes a system clock 19.
>
> Alternatively, the program schedule information could be supplied in a ROM, disk or other non-volatile memory, or it could be downloaded to a storage disk or other data storage device. The invention herein is not directed to the particular method of transmission or reception of the schedule information. *Youman, Col. 8, Lines 8-32.*

This excerpt merely describes supply of program schedule information. Neither the referenced figures, nor the referenced section, nor anywhere else in Youman is there disclosure, teaching, or suggestion for the claimed association.

Thus, Youman merely describes operation of an EPG to obtain additional information about a program. Youman does not disclose, teach or suggest the desirability of associating a target specification and a target resource with a video content program. Therefore, neither Freeman, Steele, nor Youman, alone or in combination, disclose, teach or suggest "the EPG associating a target specification to a target resource with a video content program" as claimed in claim 57. Therefore, for at least these reasons claim 57 is allowable and withdrawal of the rejection is respectfully requested.

Claim 62 recites a computer-implemented method as recited in claim 61, wherein the target specifications are correlated with the program in a program listing, and further comprising the following steps:

- checking the program listing to ascertain whether the program is interactive compatible; and

- determining that the program is interactive compatible by presence of a target specification being associated with the program in the program listing.

The Office correctly asserts that neither Freeman nor Steele specifically disclose the claim limitations of claim 62. The Office then asserts Youman to cure the defects of Freeman and Steele. Youman, however, merely describes additional information that may be viewed an EPG, as shown in the following excerpt:

> In each of the FLIP, BROWSE and MENU modes, a lower case "i" icon appears at a number of occasions in connection with certain program listings, such as movies, such as the "i" 203 shown in FIG. 20. Any time this icon appears, the user can view additional programming information, generally comprising a textual description of program content and/or other information related to the program, such as the names of cast members and the like, by depressing the "i" key 48 on the remote controller 40. An example of a display of such additional information is shown in FIG. 21. *Youman, Col. 17, Line 66 to Col. 18, Line 9.*

Thus, Youman merely describes viewing additional information in an EPG. Youman does not describe "the target specifications are correlated with the program in a program listing", "checking the program listing to ascertain whether the program is interactive compatible", and "determining that the program is interactive compatible by presence of a target specification being associated with the program in the program listing" as claimed in Claim 62. Additionally, Claim 62 is a dependent claim that is dependent from Claim 61, and as such, is also allowable for the reasons stated in relation to Claim 61. Therefore, for at least these reasons, Claim 62 is allowable and withdrawal of the rejection is respectfully requested.

Missing Limitations

With respect to pending independent claims, the rejections in the Office Action fail to give proper weight to the limitations identified above, especially since these limitations are missing from both the applied art and the art of record, either alone or in any combination. Moreover, these missing limitations are not otherwise supported by way of official notice, stated scientific theory, basis for common knowledge in the art, or cited legal precedent. The Applicant respectfully requests evidence for these missing limitations.

Conclusion

Claims 56-57 and 61-67 are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the subject application. If any issues remain that prevent issuance of this application, the Examiner is urged to contact the undersigned attorney before issuing a subsequent Action.

Respectfully Submitted,

Dated: 7/21/04

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